

New York State Department of Environmental Conservation

MAJOR PETROLEUM FACILITY LICENSE

FACILITY:

LICENSEE:

BAYSIDE FUEL OIL DEPOT CORP. 537 SMITH STREET BROOKLYN, NY 11231

BAYSIDE FUEL OIL DEPOT CORP. 1776 SHORE PARKWAY

BROOKLYN, NY 11214

The facility named above has been duly licensed, pursuant to Article 12 of the Navigation Law. Any conditions placed on this license are marked on the attached Special Conditions Check List.

MAILING CORRESPONDENCE:

LICENSE NUMBER:

2-1260

DATE ISSUED:

3/21/2016

EXPIRATION DATE:

3/31/2019

ATTN: VINCENT ALLEGRETTI

BAYSIDE FUEL OIL DEPOT CORPORATION

1776 SHORE PARKWAY

PO BOX 140128

BROOKLYN, NY 11214-0002

Commissioner of Environmental Conservation

By _

Deputy Regional Director

Title

THIS LICENSE IS NON-TRANSFERABLE



New York State Department of Environmental Conservation

MAJOR PETROLEUM FACILITY LICENSE

Tank Listing For License Number: 2-1260

Page 1 of 1

TANK NUMBER	DATE INSTALLED	TANK LOCATION	TANK TYPE	CAPACITY (Gallons)	PRODUCT STORED
001	12/01/1946	Underground including vaulted with no	Steel/Carbon Steel/Iron	500,010	#6 fuel oil
002	12/01/1946	Underground including vaulted with no	Steel/Carbon Steel/Iron	390,012	#6 fuel oil
003	12/01/1946	Underground including vaulted with no	Steel/Carbon Steel/Iron	200,004	#4 fuel oil
004	12/01/1972	Aboveground - in contact with	Steel/Carbon Steel/Iron	448,182	#2 fuel oil
005	12/01/1972	Aboveground - in contact with	Steel/Carbon Steel/Iron	448,182	#2 fuel oil
GDF1	10/01/2001	Aboveground - No Contact (on saddles,	Steel/Carbon Steel/Iron	275	diesel
OBF1	06/01/1992	Aboveground - No Contact (on saddles,	Steel/Carbon Steel/Iron	3,000	#2 fuel oil (on-site
SHT	01/01/1980	Underground including vaulted with no	Fiberglass Reinforced Plastic	250	waste oil/used oil

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 2 47-40 21st Street, Long Island City, NY 11101 P: (718) 482-4995 www.dec.ny.gov

March 21, 2016

BY MAIL AND E-MAIL (Annamarie@BaysideDepot.com)

Vincent Allegretti Senior Vice President 1776 Shore Parkway P.O. Box 140128 Brooklyn, NY 11214-0002

Dear Mr. Allegretti:

NYCRR Part 613.

Enclosed herein is your Onshore Major Oil Storage Facility License number 2-1260, which expires March 31, 2019. You must reapply 90 days before that date and comply with any new or modified conditions or guidelines to prevent, contain, cleanup, and remove discharges of petroleum to surface and groundwater. Scheduled facility inspections will be made by the Department representatives, as well as random inspections. Information regarding license fees and surcharges will be sent by the Department's Division of Management and Budget, Oil Spill Revenue Unit.

The Department bases the issuance of this license upon an evaluation of the information contained in your application, on-site facility inspections, and:

evaluation of submitted State and Federal plans to prevent, control, contain, and remove discharges; OR \square a schedule of when such plans are to be submitted.
The Department hereby certifies that the facility operator currently:
has implemented $OR \square$ is in the process of implementing: State and Federal plans and regulations for the prevention, control, containment, and removal of discharges; AND
has implemented OR \square is in the process of implementing: the requirements of 6

Included in your license are General and Special Conditions as deemed necessary to protect the waters of the State based upon evaluation of State and Federal plans, compliance with 6 NYCRR Part 613, environmental setting and/or facility inspections.

Future license renewals will be based on, among other factors, the history of spills and discharges at the facility, the history of compliance with the applicable provisions



of 6 NYCRR Part 613, a review of submitted plans and inspections of the facility, compliance with license conditions and additional guidelines as subsequently issued.

Please post this license conspicuously at the facility for which it is issued.

Sincerely,

Stephen Zahn

Deputy Regional Director Region 2 - New York City

cc: MOSF 2-1260 file

General Conditions and Information Regarding Onshore Major Oil Storage Facility Licenses

I. General Conditions

- 1. No chemical dispersants may be employed in the cleanup of a spill or discharge without approval by DEC. If a Spill Prevention and Containment Plan or spill cleanup plan contains a list of chemical or biological agents, the use of such agents is subject to prior approval from DEC.
- 2. The use of sorbents shall be limited to the cleanup of small spills and the final cleanup of large spills.
- 3. Disposal of all recovered petroleum products and oil-soaked debris shall be in accordance with 6 NYCRR Section 611.6.
- 4. The owner or operator shall maintain all equipment, including spill cleanup equipment, in good repair.
- 5. Major additions, changes, or rehabilitation in the structures or equipment of the onshore major oil storage facility which would materially affect the potential for a petroleum discharge (hereafter referred to as "project") must be approved in advance by DEC. Any amendments or changes to any plans submitted with or referred to in the license applications shall be furnished promptly to the Regional Office.
- 6. DEC shall be notified of all leaks, spills, and discharges immediately, but in no case later than two hours after the discovery of a discharge. Notifications must be made by calling the DEC Spill Hotline at (800) 457-7362 or (518) 457-7362 outside New York State.
- 7. Any person transporting and/or disposing of recovered oil and/or oily debris must be registered by DEC as a "REGISTERED WASTE HAULER," pursuant to 6 NYCRR Part 364, and must transport the material to a disposal facility shown on the Part 364 registration.
- 8. Monthly reports shall be submitted, and license fees and surcharges must be paid by the licensee as required by 17 NYCRR Sections 30.8 and 30.9, "Oil Spill Prevention and Control Licensing of Major Facilities."
- The owner or operator of the facility shall provide access to representatives of DEC during normal business hours for the purpose of determining compliance with State and Federal regulations and all general and special conditions of this license.
- 10. The owner or operator shall comply with the conditions specified in any Order on Consent or variance pertaining to the facility.

II. DEC-Initiated Modifications, Suspensions, or Revocations

- 1. DEC may modify, suspend, or revoke this license at any time; the ground for such action may include, but are not limited to, the following:
 - a. materially false or inaccurate statements in the license application or supporting documentation;
 - b. failure by the licensee to comply with any terms or conditions of the license;
 - c. exceeding the scope of the project as described in the license application;
 - d. failure to pay monthly license fees and surcharges and/or submit monthly license reports;

- e. newly discovered material information or material changes in environmental conditions, relevant technology, applicable laws, or regulations, or a change in DEC's policy since the issuance of the existing license; or
- f. non-compliance with previously issued license conditions, Orders on Consent, orders of the Commissioner, variances, any provision of the Navigation Law or Environmental Conservation Law or the regulations adopted pursuant to such laws related to the licensed activity.
- 2. DEC shall send a notice of intent to modify, suspend, or revoke a license to the licensee by Certified Mail with return receipt requested or personal service. The notice shall state the alleged facts or conduct which appear to warrant the intended action.
- 3. Within 15 days of the date of such notice of intent, the licensee may submit a written statement to DEC, giving reasons why the permit should not be modified, suspended, or revoked, or requesting a hearing, or both. Failure by the licensee to submit a timely statement shall result in DEC's action becoming effective on the date specified in the notice of intent.
- 4. Within 30 days of receipt of the licensee's statement, DEC shall take the following action. If a statement without a request for a hearing is submitted, DEC shall rescind or confirm the notice of intent based on a review of the information provided by the licensee. If a statement with a request for a hearing has been submitted, DEC shall notify the licensee of a date and place for a hearing, to be commence not later than 60 days from that notification.
- 5. In the event such a hearing is held, the Commissioner shall, within 30 days of the receipt of the complete record, and receipt of the hearing officer's findings of fact and recommendations, issue a decision which:
 - a. continues the license in effect as originally issued;
 - b. modifies the license, or suspends it for a stated period of time or upon stated conditions; or
 - c. revokes the license, including when ordered by the Commissioner, the removal or modification of all or any portion of a project, whether completed or not.

Notice of the Commissioner's decision, stating the findings and reasons for the action, shall be mailed to the licensee.

- 6. Where DEC has proposed to modify a license and the licensee requests a hearing on the proposed modification, the original license conditions remain in effect until there has been a decision issued by the Commissioner as provided herein.
- 7. Nothing in these license conditions shall preclude or affect the Commissioner's authority to issue summary abatement orders under Title 3 of Article 71 of the Environmental Conservation Law or take emergency action summarily suspending a license under section 401(3) of the State Administrative Procedure Act.

III. Licensee-Initiated Modification

Applications for modification of a license must include a written statement of necessity or reasons for the modification, as well as a description of the requested modification. DEC shall notify the licensee of its decision, by mail, within fifteen days of receipt of a completed application. An application for modification may be denied for failure to meet any of the standards or criteria applicable under the Navigation Law and regulations adopted thereunder, Article 8 of the Environmental Conservation Law or for any of the reasons set

forth in paragraphs II(1)(a)-(f) above.

DEC may determine that an application for modification shall be treated as a new application for a license if:

- the requested modification would result in a material change to existing license conditions or in the scope of the permitted activities; or
- there is newly discovered material information or there has been a material change in environmental conditions, relevant technology, or applicable law or regulations since the issuance of the existing license.

Until DEC grants a request for modification, the originals license conditions remain in effect.

Instructions: If an "X" appears in the column labeled "Condition," the specified condition applies to the license issued to the facility. The details of each condition and compliance dates are included in Attachment 3(d), "Onshore Major Oil Storage Facility Special License Conditions – Instructions and Deadlines."

Condition	Section Number	ComplianceDate (mandaldanny)	<u>Section Title</u>	
	The state of the s	INSTALLING MO	NITORING WELLS	
	1(a)	1 1	Initial Installation of Monitoring Wells	
	1(b)	1 1	Additional Monitoring Wells	
	1(c)	/ /	Geological Survey of Groundwater Flow	
	SAMP	LING AND TESTING	OF MONITORING WELLS	
	2(a)	1 1	Initial Testing of Monitoring Wells	
	2(b)	/ /	Six-Month Testing of Monitoring Wells	
	2(c)	See section	Annual Testing of Monitoring Wells	
	2(d)	See section	Monthly Monitoring of Monitoring Wells	
	SPII	LL PREVENTION AN	D CONTAINMENT PLAN	
	3(a)	/ /	P.E. Certification/Management Review of Plan	
	3(b)	/ /	Description of Secondary Containment System	
	3(c)	1 1	Testing of Secondary Containment System (Initial Construction)	
	3(d)	1 1	Engineering Plan for Upgrading Secondary Containment System	
	3(e)	1 1	Implementation of Engineering Plan	
	3(f)	1 1	Site Map	
	3(g)	12/31/2018	Description of Previous Spills	
	3(h)	12/31/2018	Environmental Compliance Report	
	3(i)	/ /	Facility Response Plan	
	3(j)	11/13/2020	Inspection Certification of Secondary Containment Systems (every five years)	
	3(k)	03/11/2019	Updated SPCC Plan / Facility Response Plan	
CLOSURE OF FACILITY				
	4(a)	proposal 60 days prior to closure	Site Assessment	

Onshore Major Oil Storage Facility Special License Conditions - Instructions and Deadlines

The Department of Environmental Conservation (DEC) is required by Article 12 of the Navigation Law to

protect and preserve the lands and waters of New York State from all discharges of petroleum, including any from onshore major oil storage facilities. To protect and preserve the waters of the State, owners/operators are required to show how they guard against contamination of surface and groundwater. Surface and groundwater protection at MOSFs is accomplished through the following:

- installing groundwater monitoring wells
- monitoring groundwater quality; and
- developing and implementing the Spill Prevention and Containment Plan, in accordance with 6 NYCRR Section 610.4(a)(4).

The following sections detail how to meet each of the conditions marked on the Special License Conditions Checklist. Sections 1 through 3 correspond to the three elements of protection he waters of the State. The section numbers on the checklist correspond to the following section numbers.

1. Installation of Monitoring Wells

Monitoring wells are needed to determine ambient groundwater quality and to detect possible contamination that could come from any portion of the facility. The number and location of wells must be approved by DEC. Plans for existing and/or proposed wells must be submitted to the issuing Regional Office by the indicated date. Subject to DEC approval, these monitoring wells must be installed by the date set by DEC.

a. Initial Installation of Monitoring Wells

Install at least one (1) well hydraulically up-gradient of the facility and install at least three (3) wells hydraulically down-gradient of the facility, spaced as needed to detect any releases from the facility. Monitoring wells must be properly installed to a depth that compensates for seasonal variations.

When adjacent facilities exist, monitoring wells should be placed on the property lines to determine the source of contamination. In this case, common monitoring wells will exist between facilities so the schedules for testing should be consistent.

•	Submit a Plan by:	/	/
•	Install Wells by	1	,

b. Additional Monitoring Wells

Installation of additional wells may be necessary based on site-specific conditions, information obtained from existing wells, evidence of past spills, or evidence of a potential spill source. The number and location of all additional monitoring wells must be submitted on a site plan for approval by the Regional Office prior to installation.

٠	Number of Wells t	to be 1	Installed:	
•	Install wells by:	1	1	

c. Geological Survey of Groundwater Flow

A geological survey of groundwater flow direction is necessary for installation of an effective groundwater monitoring system. A geological survey report must be submitted to the regional office to verify the proper placement of the groundwater monitoring wells or if additional wells are needed prior to the installation of the additional wells.

2. Sampling and Testing of Monitoring Wells

Owners/operators shall conduct a groundwater sampling and testing program to ensure protection of groundwater at the facility. Owners/operators must test the groundwater for the presence of the different types of petroleum that are stored at the site. The groundwater monitoring program must include testing for methyl tertiary butyl ether (MTBE) whenever petroleum is stored or has been stored since the beginning of MTBE usage in the 1970s.

All sampling and testing must be conducted by a third-party laboratory which is ELAP-certified by the NYS Department of Health for the specific parameter or category of parameters. A list of certified laboratories is available at http://www.wadsworth.org/labcert/elap/elap.html. The laboratory must send the test results directly to both http://www.wadsworth.org/labcert/elap/elap.html. The facility operator may monitor for free product without the aid of an outside contractor. Upon request, laboratories shall submit analytical results in an electronic format acceptable to DEC.

TABLE 1 – RECOMMENDED TESTING METHODS FOR	
DETECTING PETROLEUM IN GROUNWATER.	
Site-energific concerns or changes in testing methods may allow for	

Site-specific concerns or changes in testing methods may allow for the substitution of Environmental Protection Agency (EPA) methods.

To test for	Use EPA Method
Volatile Organic Compounds (VOCs)	8260, 524.2 624, 8021, 502.2
Semivolatile Organic Compounds (SVOCs)	8260 (Base Neutral Extractable) or 625
Initial Testing of Monitoring Wells	8260 + MTBE, 8270
Type of Petroleum	Must test for*
Gasoline	VOC + MTBE
Aviation Gasoline	VOC + MTBE
Kerosene	VOC + MTBE and SVOC
Diesel	VOC + MTBE and SVOC
Fuel Oils	VOC + MTBE and SVOC

^{*} Measurements of MTBE are not standard outputs of these EPA Methods. To obtain such a measurement, the lab must be instructed to add MTBE as a target analyte to the test method selected. Minimum detection limit for MTBE is 5 ppb.

EPA 8021 test analyzes for a broad number of aromatic volatile compounds that are found in light grade petroleum products by purge-and-trap capillary column gas chromatography with a photoionization detector (GC-PID). Identification of a compound is based on detector response and retention time.

EPA 624 (EPA 8260) test series covers a broader number of substances using gas chromatography mass spectrometry (GC-MS) by extraction. This is effective in testing for volatile organic compounds in gasoline and aviation gasoline.

EPA 8270 (EPA 625) test series covers a broader number of substances using GC-MS by extraction. This is useful for detecting semivolatile organics found in kerosene, fuel oil, and jet and diesel fuels.

EPA 500 test series was adopted by the NYS Department of Health to test drinking water. The 502.2 test is

applicable in the determination of 33 aromatic hydrocarbons using a chromatographic/photoionization detector. This is effective for detecting volatile organics found in light grade products, such as gasoline.

EPA 524.2 is a capillary column GC-MS purgeable-organics test for volatile organics which have a vapor pressure equal to or greater than 0.1 mm of Hg. The method is suited for the detection of MTBE and is described in EPA's reference "Methods for the Determination of Organic Compounds in Drinking Water."

For quick reference on what compounds of petroleum products should be monitored and which analytical methods can be used in analyzing them, see Chart 7-1, Section 7.0 of "Sampling Guidelines and Protocols," NYS Department of Environmental Conservation, Division of Water, dated March 1991.

Note: GC-PID methods used to analyze for MTBE are subject to interference (i.e., co-elution problems) when samples contain significant amounts of petroleum product contamination. This may lead to false-positive MTBE results. Results can be verified by use of GC-MS methods.

Sampling Procedures

Groundwater samples for analysis must be taken and handled properly to ensure that they are representative of in-situ conditions. Standard practice is to purge wells prior to sampling by bailing 3 to 5 volumes of water present in the well prior to taking samples. Guidance on purging and other approved techniques may be found in DEC's "Sampling Guidelines and Protocols" manual. Alternate sampling procedures, such as (but not limited to) low- and no-flow methods, may be appropriate in specific situations as approved by DEC.

If free product is found in any monitoring wells, the discharge must be reported to the DEC Spill Hotline immediately, but in no case later than two house after the discharge. The owner/operator must perform the following testing and monitoring of wells, and provide results and reports as scheduled.

a. Initial Testing of Monitoring Wells

All monitoring wells must have an initial testing to determine a baseline assessment of water quality, using appropriate methods discussed above.

Test Results to be Submitted by: / /

b. Six-Month Testing of Monitoring Wells

All monitoring wells must be retested six months after initial testing. This requires analytical testing as described in Section 2(a) above. Based on the results of the initial and six-month testing, the Regional Office will establish a schedule for further sampling and testing.

• Test Results to be Submitted by: / /

c. Annual Testing of Monitoring Wells

Annual testing of monitoring wells must be done between April 15 and May 15 of each year using the analytical tests that are described in Section 2, Table 1. The Regional Office may specify a different testing period if site-specific conditions indicate the need for more frequent testing.

• Test Results to be Submitted Annually by: June 30th

d. Monthly Monitoring of Wells

Routine monitoring for free product is to be done at least monthly using manual methods, such as a bailer, product paste, electronic hydrocarbon probe, or other equivalent method. Results from the visual test are to be recorded and kept on file at the facility as part of the facility's monthly inspection. If free product is found, DEC must be notified on the DEC Spill Hotline immediately, but in no case later than two hours after the discharge. DEC may request that these monthly reports be submitted to the Regional Office.

- Submit Monitoring Well Monthly Reports to Regional Office.
- Keep Monitoring Well Monthly Reports on file at facility.

3. Spill Prevention and Containment Plan

A Spill prevention and Containment Plan (Plan) prepared in accordance with 6 NYCRR Section 610.4(a)(4) must be submitted to DEC prior to the issuance of a license. The Plan must include the following elements:

- Spill Prevention, Control and Countermeasure (SPCC) Plan and a Facility Response Plan written according to 40 CFR 112;
- U.S. Coast Guard Operations Manual written according to 33 CFR 151, 154, 155, and 156;
- Groundwater Contingency Plan written in accordance with Special License Conditions 1 and 2 and 6 NYCRR Section 610.4(a)(4)(ii);
- site plan written in accordance with Special License Condition 3(f) and 6 NYCRR Section 610.4(a)(iii);
- description of previous spills written in accordance with Special License Condition 3(g) and 6 NYCRR Section 610.4(a)(4)(iv);
- Environmental Compliance Report written in accordance with Special License Condition 3(h) and 6 NYCRR Section 610.5(a)(4);
- inspection reports for secondary containment pursuant to 6 NYCRR Section 613-4.3; and
- inspection records for aboveground storage tanks pursuant to 6 NYCRR Section 613-4.3.

The following sections detail how to satisfy the elements of a Spill Prevention and Containment Plan.

a. P.E. Certification/Management Review of Plan

A professional engineer (P.E.), licensed and registered in New York State (NYS) by the NYS Education Department, must review and certify that the Spill Prevention and Containment Plan has been prepared in accordance with good engineering practices and other requirements as defined in 40 CFR 112.3(d). The Plan must be updated and recertified whenever any major addition, change, or rehabilitation occurs, as defined in 6 NYCRR Section 610.5(c)(2). If no major changes occur, the owner/operator must complete a review and evaluation of the Plan at least once every five years. The owner/operator must submit all recertification or management reviews to the Regional Office. If the SPCC Plan has not been signed by a P.E., licensed and registered in NYS, then the recertification must include a review and recertification by a New York licensed and registered P.E.

• P.E. Certification/Management Review to be Submitted by: /

b. Description of Secondary Containment System

Owners or operators shall submit a description of the existing secondary containment system in detail and explain how this system prevents a spill of petroleum from a reaching the lands or waters outside the containment area before cleanup occurs.

Secondary Containment Description to be Submitted by: / /

c. Testing of Secondary Containment System (Initial Construction)

The secondary containment system shall be tested according to the guidance provided in DEC's technical guidance memo, SPOTS #10, "Secondary Containment Systems for Aboveground Storage Tanks." The Plan must contain a description of the procedures and methods used to inspect and test the effectiveness of the system.

When soil permeability is being evaluated, the test methods, procedure, results, test limitations and advantages as outlined in API Publication Standard 351, "Overview of Soil Permeability Test Methods," April 1999, are considered to be good engineering practice and must be used by the design engineer when seeking approval from the Regional Office.

• Test Results to be Submitted by: / /

d. Engineering Plan for Upgrading Secondary Containment System

If the secondary containment system does not meet the standards set forth in 6 NYCRR Section 613-4.1(b)(1)(v) or 613-4.1(c)(1), then an engineering plan certified by a P.E. (licensed and registered with the NYS Education Department) must be submitted to the Regional Office describing how existing systems will be improved. This plan must include: the composition and permeability of the existing soil; the methodology that will be used to upgrade the secondary containment system, such as a synthetic liner; the specifications of the material to be used; procedure on installation; and the proposed permeability of the resulting containment system.

This plan must be submitted to and approved by the Regional Office before construction is started.

Engineering Plan to be Submitted by: / /

e. Implementation of Engineering Plan

After the engineering plan to improve the secondary containment system has been reviewed and approved by DEC, the owner or operator may begin implementation of the proposed secondary containment system.

Construction to be Completed by: / /

f. Site Map

The Plan must contain a site map showing the location of all surface water, observation, monitoring, and recovery wells, location of tanks and their respective secondary containment areas, product transfer areas, and spill cleanup equipment storage. The scale used for the site map must be drawn such that all of the referenced map features (e.g., tanks, transfer areas, wells, etc.) are readily visible. This must be submitted to DEC in an acceptable electronic format, if available.

Site Map to be Submitted by: / /

g. Description of Previous Spills

The Plan must contain a description of all spills, discharges, and cleanup activities during the preceding 12-month period. This description must include the cause, type and amounts of product spilled and recovered, corrective action taken, cleanup effectiveness, long-term cleanup plans, and plans for preventing the recurrence of a spill or discharge. This description must be submitted within one year after discovery of the spill or discharge, or at the time the application for a transferred or renewed license is submitted to DEC, whichever is sooner.

• Description of Previous Spills to be Submitted by: 12/31/2018

h. Environmental Compliance Report

The Plan must contain an assessment of compliance with 6 NYCRR Parts 610, 611, and 613, 17 NYCRR Parts 30 and 32, 40 CFR 112, 40 CFR 280, and special conditions required under this license. This must include a status report and schedule for compliance. The Environmental Compliance Report Guidance is attached.

Environmental Compliance Report to be Submitted by: 12/31/2018

i. Facility Response Plan

Facility Response Plans are required under 40 CFR 112.20 and the Oil Pollution Act (OPA) of 1990 for any onshore facility that could reasonably be expected to discharge oil to navigable waters, adjoining shoreline, or the exclusive economic zone. These must contain plans for responding, to the maximum extent practical, to a worse-case discharge.

Any facility which must have a Facility Response Plan pursuant to the OPA must file a copy of that plan and any subsequent amendments with DEC. Such plan must be filed concurrent with the filing with EPA.

• Facility Response Plan to be Submitted by: / /

j. Inspection Certification of Secondary Containment Systems

Secondary containment systems must be inspected monthly for compliance with standards set forth in 6 NYCRR Section 613-4.1(b)(1)(v) or 613-4.1(c)(1). Inspection reports must be maintained which identify any deficiencies found during the inspection and any subsequent repairs rendered. See 6 NYCRR Section 613-4.3(b)(1).

DEC will accept documented monthly inspections that are "visually performed," provided they are performed in conjunction with in-depth integrity inspections at least once every five years. Such in-depth inspections are to be conducted and certified by a P.E., licensed and registered in NYS by the NYS Education Department. The Regional Office must be notified prior to any modifications and repairs to the secondary containment systems. The Regional Office will decide if additional information or plans are required. When soil permeability is being evaluated, the test methods, procedure, results, test limitations and advantages as outlined in API Publication Standard 351, "Overview of Soil Permeability Test Methods," April 1999, must be considered by the design engineer prior to approval by the Regional Office.

- Test Results to be Submitted by: / /
- In-depth Integrity Inspection and Reports to be Submitted by: 11/13/2020 and every five years thereafter.

k. Updated SPCC Plan/Facility Response Plan

Any amendments to the SPCC Plan required by revisions to 40 CFR 112 or any other update or change whatsoever must be filed with DEC. Updated SPCC Plan must be submitted within 60 days of the effective date of the amendments.

4. Closure of Facility

a. Site Assessment

Prior to permanently closing a facility, the facility owner must perform a site assessment to determine if environmental contamination exists at the facility. The site assessment must include both soil and groundwater samples. Sample locations must include, at a minimum, the areas adjacent to the tanks, manifolds, loading racks, and transfer areas.

Prior to conducting the site assessment, a proposal must be submitted to DEC which details the assessment. The proposal must include, at a minimum, a site sketch indicating the sample locations, a description of the technology to be used to collect the samples, and the sampling methodology to be used to collect the samples and the sampling methodology to be used to analyze the samples.

If contamination is encountered at any time during the site assessment, DEC shall be notified immediately, but in no case later than two hours after discovery of the discharge.

A site assessment proposal shall be submitted 60 days prior to permanent closure. The site assessment shall commence in accordance with an agreed upon time frame after DEC's acceptance of the site assessment proposal. A site assessment report detailing the findings of the assessment shall be submitted to DEC no later than 60 days after the completion of the site assessment.

Guidelines on Installation of Monitoring Wells

The following is DEC's guidance on the installation of monitoring wells at onshore major oil storage facilities. All installations of monitoring wells must follow guidelines from 6 NYCRR Section 360-2.11(a)(8). In addition, all monitoring well installations must comply with the following guidelines:

- 1. All wells must be four (4) inches in diameter or larger.
- 2. A log must be kept for each boring that is made. Soil samples must be taken when the composition of

the soil layers changes or at five-foot (5-foot) intervals, whichever comes first. The log must include a general description of the composition of the soil and the depth that groundwater was first encountered.

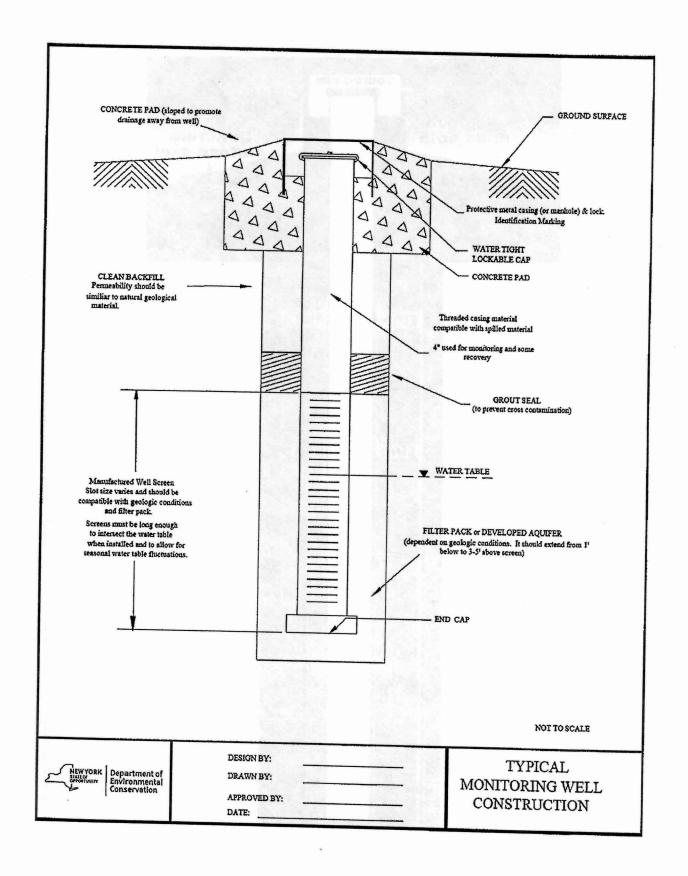
- 3. Monitoring wells must be installed plumb and straight.
- 4. The well must be sufficiently developed to ensure that it is free-flowing and accurately represents the conditions of the groundwater table.

All monitoring wells must conform to the well specifications given in the section. The number and location of monitoring wells will be approved by the Regional Office based on topography and geological studies of the facility. A drawing of an acceptable monitoring well is given on the next page.

All monitoring wells shall be installed outside a secondary containment area, except where DEC has approved an alternate installation plan. Monitoring wells that are installed inside the secondary containment area must have water tight well caps and be installed so the top of the well is above the height of the dike wall. In addition, the well casing must be properly sealed to prevent infiltration of petroleum in the event of a spill.

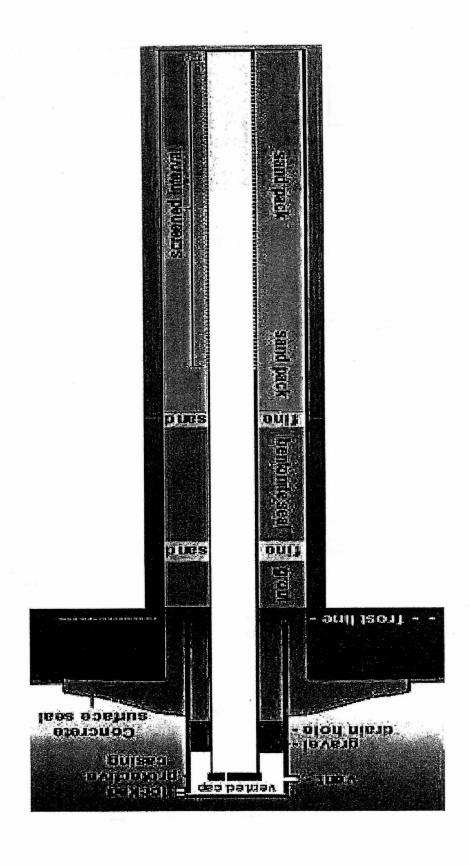
Monitoring Well Design

Figure 1: Typical Monitoring Well Construction



Monitoring Well Design

Figure 2: A "Stick-Up" Groundwater Monitoring Well Construction





Praxair Services, Inc.

3755 N. Business Center Drive Tucson, Arizona 85705 Toll Free (800) 989-9929 Tel: (520) 888-9400 Fax: (520) 293-1306

Tracer Tight® Leak Test

Bayside Fuel Oil Depot Corp Shore Parkway, Grand and Smith Street Facilities Brooklyn, NY

Praxair Job No. 70055694

Prepared for:
Bayside Fuel Oil Depot Corp
1776 Shore Parkway
Brooklyn, NY 11214

Vincent Allegretti

Tel: (718) 372-9800

Submitted by:

Praxair Services, Inc. Alan Harris – Commercial Operations Manager

E-Mail: alan_harris@ praxair.com Website: http://www.praxair.com/services Site Location: Grand, Shore, Smith Facilities

Praxair Job No.: 70055694

Inoculation Information:

社會的	Inoculation:	Sampling:
Start Date: Completion Date:	August 25, 2014 August 25, 2014	September 18, 2014 October 24, 2014
	Job Completion Date:	October 30, 2014

Notes:

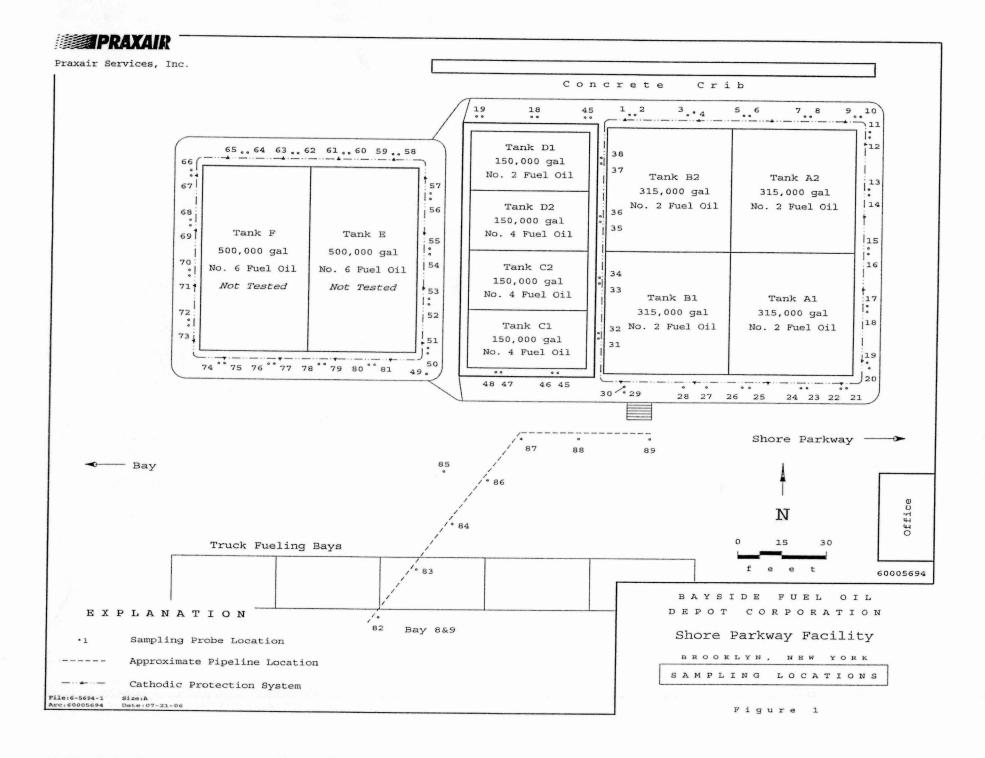
All of the below listed tanks were inoculated on the 25th of August with the corresponding tracers. A three day, three week and an 8 week round of samples were taken. The samples were run in the Tucson, AZ laboratory. All of the underground storage tanks and the pipeline passed the tracer testing.

Annual Testing Results:

Facility:	System:	Type:	Capacity:	Product:	Tracer:	Result:
Grand Street	1	UST	100,000	#2 Fuel Oil	R R	
Grand Street	2	UST	250,000	#2 Fuel Oil	A	Pass
Grand Street	3	UST	150,000	#2 Fuel Oil		Pass
Grand Street	4	UST	250,000	ULSD	E	Pass
Grand Street	5	UST	250,000	ULSD	R	Pass
Shore Parkway	A1	UST	315,999	#2 Fuel Oil	<u> </u>	Pass
Shore Parkway	A2	UST	315,000	#2 Fuel Oil	E	Pass
Shore Parkway	B1	UST	315,000	#2 Fuel Oil	A	Pass
Shore Parkway	B2	UST	315,000	#2 Fuel Oil	R	Pass
Shore Parkway	C1	UST	150.000	ULSD	G	Pass
Shore Parkway	C2	UST	150,000	ULSD	E	Pass
Shore Parkway	D1	UST	150,000	ULSD	R	Pass
Shore Parkway	D2	UST	150,000		Α	Pass
Shore Parkway	Pipeline	Pipeline	160'	ULSD	E	Pass
Smith Street	1	UST	The same of the sa	ULSD/#2Fuel Oil	Mixed	Pass
Smith Street	2		500,000	#6 Fuel Oil	E	Pass
Smith Street		UST	400,000	#6 Fuel Oil	Α	Pass
omini oneet	3	UST	200,000	#4 Fuel Oil	R	Pass

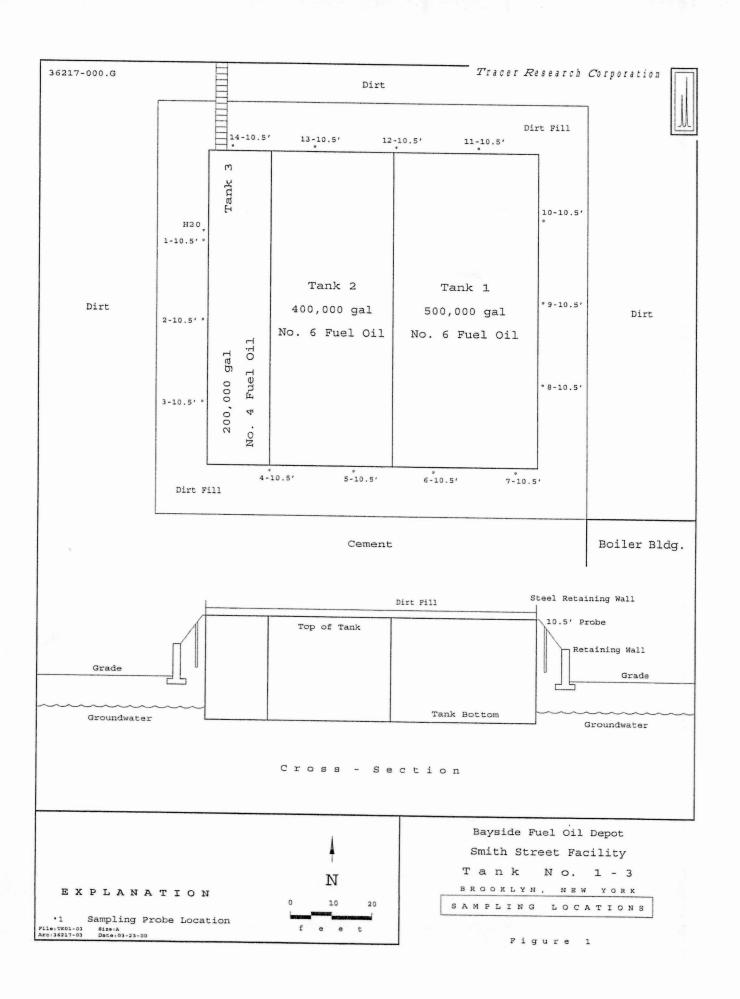
Alan Harris- Commercial Operational Manager Date: 10/30/14

Praxair Services, Inc. hereby certifies that the above listed systems(s) have been tested by means of Tracer Tight®, which has been evaluated by a third party according to protocols issued and approved by the United States Environmental Protection Agency (EPA) as being able to detect a leak at a rate of 0.05 gallons per hour with a Probability of Detection (PD) of 0.97 and a Probability of False Alarm (PFA) of 0.029. If you have any questions or concerns, please call Praxair Services, Inc. at 800-989-9929 ext.232.



RF:ZT 118Z/61/RB

/182663/44





Praxair Services, Inc.

3755 N. Business Center Drive Tucson, Arizona 85705 Toll Free (800) 989-9929

Tel: (520) 888-9400 Fax: (520) 293-1306

1.1 Test Concept

Tracer Tight® leak testing is performed by mixing a volatile chemical concentrate, a tracer, with the product inside a tank or piping system. The tracer is selected for its compatibility with the product in the tank and piping system and its performance characteristics in each specific test environment. The tracer chemical is added to the product in very low concentrations, typically 1 to 10 parts per million (ppm). The tracer has no impact on the physical properties of the product and works with all types of liquids. The tracers are non-corrosive, inert compounds.

The tracer chemical is distributed throughout the tank and piping system by the motion of the product and vapors. The tracer also partitions into the vapor space above the product. If the product from the tank or pipeline escapes into the soil, the tracer then evaporates out of the product and disperses into the surrounding soil by molecular diffusion.

After the tracer has had time to diffuse and migrate through the soil around the leak, soil gas samples are collected from a leak detection probe system that is installed around the tank. The system is tested by taking a soil gas sample out of each probe, and analyzing these samples with a gas chromatograph for the presence of tracer. The detection of tracer in the soil vapor samples is then used as the sole criteria for determining if there is an active leak.

1.2 Probe System

Once installed, each probe is tested for any obstruction interfering with the flow of air required for testing. Vacuum measurements are taken to determine soil permeability and to help identify the need for any system design modifications.

1.3 Inoculation Procedures

Inoculation is the introduction of the *TracerTight*® compound into the product of the Tank to be tested. This compound (Tracer) is added to the product to achieve a concentration of one to ten parts per million. Tracer is injected directly into the main product stored in the tank via the tank roof gauging drop hatch or via receipt/fill lines.

After the Tracer has been introduced into the product, product samples are collected and analyzed to ensure proper inoculation has been achieved.

1.4 Sampling Procedures

Background Samples – soil gas samples are collected from the monitoring probe system before inoculation to ensure the novelty of the inoculation tracer (to ascertain the background level of the chemical).

24 Hrs Samples - soil gas samples will be collected from the monitoring probe system 24 hrs after confirmation of product / Tracer mixing.

2-3 week Samples - soil gas samples will be collected from the monitoring probe system 2-3 weeks after confirmation of product / Tracer mixing.

8 week Samples – the final soil gas samples will be collected from the monitoring probe system 8 weeks after confirmation of product / Tracer mixing.

Sampling Process - The aboveground end of the probe will be fitted with a probe adaptor and a length of polyethylene tubing leading to a vacuum pump. To ensure adequate flow of gas into the probe, the flow of gas will be monitored by a vacuum gauge.



The evacuation time in minutes versus the vacuum in inches of mercury (Hg) will be used to calculate the necessary evacuation time. The vacuum will be monitored and recorded for each sample pulled. During the soil gas evacuation, samples will be collected from the evacuation line and transferred to designated sample cans.

1.5 Analytical Procedures

A laboratory grade GC, equipped with an electron capture detector (ECD), will be used for the analysis of the soil gas samples. Compounds will be separated in the GC on packed analytical columns in a temperature controlled oven. Nitrogen will be used as the carrier gas.



1.6 Quality Control

Praxair has incorporated stringent quality assurance and quality control into its Tracer Tight® Leak Detection Method. Trained personnel, equipment calibration checks, background system checks and the leak simulation are designed to eliminate any false detection and ensure a valid test each time.

1.7 Criteria for Determination of Leakage

Determination of leakage is based on the presence or absence of tracer. In principal, any tracer detected indicates a leak. In practice, the act of bringing Tracer to the site makes the detection of extremely low background levels a frequent occurrence. Samples are collected from the ambient air around the tanks and from the probes under the tanks before and during the testing. Therefore, leakage is based on two criteria: the detection of tracer higher than levels present in background samples, and an increase in tracer concentration over time.

THIS INFORMATION IS PROPERTY OF PRAXAIR SERVICE, INC. AND MAY NOT BE TRANSMITTED, COPIED OR DISCLOSED, IN WHOLE OR IN PART, WITHOUT WRITTEN PERMISSION FROM PRAXAIR SERVICE, INC.

Results of U.S. EPA Standard Evaluation

Nonvolumetric Tank Tightness Testing Method

This form tells whether the tank tightness testing method described below complies with the performance requirements of the federal underground storage tank regulation. The evaluation was conducted by the equipment manufacturer or a consultant to the manufacturer according to the U.S. EPA "Standard Test Procedure for Evaluating Leak Detection Methods: Nonvolumetric Tank Tightness Testing Methods." The full evaluation report also includes a form describing the method and a form summarizing the test data.

Tank owners using this leak detection system should keep this form on file to prove compliance with the federal regulations. Tank owners should check with State and local agencies to make sure this form satisfies their requirements.

Method D	Description				
Name	Tracer Tight [®]				
Version					
Vendor	Tracer Research Corporation				
(address)	3755 North Business Center Drive				
(city)	Tucson (state) Arizona (zip) 85705 (phone) 602/888-9400				
Evaluatio	on Results				
probability of tests. A 95% c from 0					
test results of	ding probability of detection [P(D)] of a <u>0.05</u> gallon per hour leak is <u>100</u> % based on the <u>45</u> detections out of <u>45</u> simulated leak tests. A 95% confidence interval for P(D) is from 0 100 %				
The corresponding probability of detection [P(D)] of a <u>0.1</u> gallon per hour leak is <u>100</u> % based on the test results of <u>93</u> detections out of <u>93</u> simulated leak tests. A 95% confidence interval for P(D) is from <u>96.2</u> % to 100 %					
Does this meth results on page	od use additional modes of leak detection? 🗵 Yes 🗆 No. If Yes, complete additional evaluation 3 of this form.				
federal perfor	results above, and on page 3 if applicable, this method does does does not meet the mance standards established by the U.S. Environmental Protection Agency (0.10 gallon per of 95% and P(FA) of 5%).				
Test Con	ditions During Evaluation				
The evaluation inches in diam	n testing was conducted outside a <u>55</u> -gallon steel <u>fiberglass</u> tank that was <u>22</u> neter and <u>34</u> inches long, installed in silty clay native soil backfill.				
The ground-w	vater level was 0 inches above the bottom of the tank.				

Nonvolumetric TTT Method Version	Tracer Tight®	
Test Conditions I	ouring Evalua	ation (continued)
The tests were conducted wi		
	Detween product added	d to fill the tank and product already in the tank
The product used in the eval	uation was regular lea	ided gasoline
This method may be affected ranges of conditions under v	l by other sources of invhich the evaluation w	terference. List these interferences below and give the as done. (Check None if not applicable.)
™ None	\$.	
	Interferences	Range of Test Conditions
*		
-		
Limitations on th	e Results	
The performance estimates a	bove are only valid wh	ien:
 The method has not been 	substantially changed	l .
 The vendors instructions 	for using the method	are followed.
The tank contains a prod	uct identified on the m	ethod description form.
 The tank capacity is <u>NA</u> 		
The difference between a	dded and in-tank prod	luct temperatures is no greater than + or - NA

Check if applicable:

degrees Fahrenheit.

Temperature is not a factor because Tracer Tight is an external leak detection method

- The waiting time between the end of filling the test tank and the start of the test data collection is at least NA hours.
- The waiting time between the end of "topping off" to final testing level and the start of the test data collection is at least <u>NA</u> hours.
- The total data collection time for the test is at least <u>NA</u> hours.
- The product volume in the tank during testing is NA % full.
- This method a can cannot be used if the ground-water level is above the bottom of the tank. Other limitations specified by the vendor or determined during testing:

 Soil must be permeable enough to yield at least 0.15 cfm of air through a 3/4" nominal diameter probe under a vacuum of 15" of Hg.

Nonvolumetric TTT Method Tracer Tight [®] Version	
>Safety disclaimer: This test procedure only a leaks. It does not test the equipment for safet	ddresses the issue of the methods ability to detect y hazards.
Additional Evaluation Results	s (if applicable)
This method, which declares a tank to be leaking has an estimated probability of false alarms IPCA	when water ingress is detected)] of N/A % based on the test results of
The corresponding probability of detetecton [P(D) based on the test results of <u>N/A</u> detections perfect score during testing does not mean that the 95% confidence interval for P(D) is from <u>N/A</u>	out of N/A gallon per hour leak is N/A % out of N/A simulated leak tests. Note: A method is perfect. Based on the observed results, a % to 100 %.
>Water detection mode (if applicable)	
Using a false alarm rate of 0% the minimum water probability of detection is <u>0.008</u> inches.	level that the water sensor can detect with a 100%
Using a false alarm rate of 5% the minimum chang 95% probability of detection is 0.19 inches.	e in water level that the water sensor can detect with a
Based on the minimum water level and change in alarm rate of 5% and a 95% probability of detection	
Certification of Results	
I certify that the nonvolumetric tank tightness testi	ng method was installed and operated according the uation was performed according to the standard EPA ting methods and that the results presented above are
Curtis W. Bryant	Control Strategies Engineering
(printed name)	(organization performing evaluation)
hotton W. Bryand	12550 West Manville Road Tucson, Arizona 85743
signature)	(city, state, zip)
May 20, 1992	(602) 682-8726
date)	(phone number)